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ARENT FOX KINTNER PLOTKIN & KAHN 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036				KRONENTHAL, CRAIG W
ART UNIT		PAPER NUMBER		
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DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/086,630	KARASAWA, HIDEYASU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Craig W Kronenthal	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) 11 and 16 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Objections***

2. Claim 11 is objected to because of the following informalities:

- On lines 2-3 of claim 11, "generating at least one at least one of said element module data" should be replaced with "generating at least one of said element module data."

Appropriate correction is required.

3. Claim 16 is objected to because of the following informalities:

- In line 1 of claim 16, "a program" should be replaced with "a computer program embodied in a computer readable medium for performing the steps of."

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "said material module data and said element generating processing module data" in lines 4-6. There is insufficient antecedent basis for this limitation in the claim. Neither claim 2 nor claim 3 previously mentions either one of these module data types.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6, 7, 10, 14, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Fredlund et al. (PN 5,815,645). (hereinafter Fredlund)

Regarding Claim 1: Fredlund discloses an image processing method for image processing by using information indicating characteristics of all or part of a consumer item and a routine thereof, comprising the steps of:

- generating material module data indicating an attribute of a material [Fig. 5. The background (122) represents a material, which is generated from the wallpaper (123) (col. 4 lines 54-57).];
- generating element generating processing module data indicating an attribute of processing for generating an element serving as a component of a first artifact, that is, said consumer item, by using said material [Figs. 2, 4, and 5. The element generating processing module data (100) indicates a plan to generate a merged image (114) representing an element (col. 4 lines 34-37). The element is a component of the first artifact represented by the combination of the frame (119) and merged image (114) (col. 4 lines 38-40).];
- generating element module data indicating an attribute of said element using said material module data and said element generating processing module data [Figs. 2, 4, and 5. The element is the merged image (114) being composed of the material (122) and element generating processing module data (100) (col. 4 lines 24-26 and 50-57).];
- generating first artifact module data indicating an attribute of said first artifact using said element module data [Figs. 4 and 5. The first artifact is the combination of the frame (119) and the merged image (114) (col. 4 lines 38-40).];
- generating second artifact module data indicating an attribute of a second artifact to be linked with said first artifact [Figs. 4 and 5. The second artifact is

represented by the table (120) (col. 5 line 1). The two artifacts are then linked together (col. 4 lines 38-40).];

- storing said first artifact module data and said second artifact module data in a searchable form [Fig. 1. The CPU (10) stores the prestored digital images, which includes such digital images as, the combination of the merged image (114) and the frame (119) and table (120) (col. 4 lines 14-20).]; and
- generating image data of a scene connecting said first artifact and said second artifact by using said stored first artifact module data and said second artifact module data [Figure 5 represents the generated scene, which links/connects the first artifact (114 and 119) and the second artifact (120) (col. 4 lines 38-40)].

Regarding Claim 2: Fredlund discloses an image processing method for image processing by using information indicating characteristics of all or part of a consumer item and a routine thereof, comprising the steps of

- generating element module data indicating an attribute of an element serving as a component of a first artifact, that is, said consumer item [The analogous arguments of claim 1 are applicable.];
- generating first artifact module data indicating an attribute of said first artifact by using said element module data [The analogous arguments of claim 1 are applicable.];

- generating second artifact module data indicating an attribute of a second artifact to be linked with said first artifact [The analogous arguments of claim 1 are applicable.]; and
- generating image data of a scene linking said first artifact and said second artifact by using said first artifact module data and said second artifact module data [The analogous arguments of claim 1 are applicable.].

Regarding Claim 3: An image processing method as set forth in claim 2, further comprising the steps of inputting image data of a target element, analyzing the input image data, and generating said element module data by using said material module data and said element generating processing module data selected based on results of the analysis [Figs. 1, 2, 4, and 5. The CPU (10) inputs image data via the second input device (14) (col. 3 lines 13-14). This data is manipulated and is therefore the target element (col. 1 lines 14-16). The step of analyzing the input data is the process of scanning a piece of the location, for example the wallpaper (123) (col. 4 lines 54-63). The element module data, represented by the merged image (114) contains the background (122), which is selected based on the results of the scan and the element generating processing module data (col. 4 lines 24-26 and 50-57).]

Regarding Claim 6: Fredlund discloses an image processing method as set forth in claim 2, further comprising the steps of

- generating first artifact generating processing module data indicating an attribute of processing performed by using said element so as to obtain said first artifact [Fig. 5. The element, represented by the merged image (114), is combined with the frame (119) to form the first artifact (col. 4 lines 38-40). It is inherent that data, such as instructions, are generated to carry out this process of combining. The frame (119) is used only as an example. The element (114) may be located anywhere in the room, so data indicating its location (in this case mounted to the frame (119)) must be generated (col. 4 lines 36-38).] and
- generating said first artifact module data by using said element module data and said first artifact generating processing module data [Figs. 4 and 5. The first artifact is the combination of the frame (119) and the merged image (114) (col. 4 lines 38-40). This combination is generated using the element (114) and instructions to mount the merged image on the frame (119).].

Regarding Claim 7: Fredlund discloses an image processing method as set forth in claim 6, further comprising the steps of inputting image data of a target first artifact, analyzing the input image data, and generating said first artifact module data by using said element module data and said first artifact generating processing module data based on results of the analysis [Figs. 1, 2, 4, and 5. The CPU (10) inputs image data

via the second input device (14) (col. 3 lines 13-14). This data is manipulated and is therefore the target first artifact (col. 1 lines 14-16). The input data can be analyzed to select an appropriate color frame or frame composition (ie. wood or metal) (col. 5 lines 22-33). The first artifact module data, represented by the combined merged image (114) and frame (119), is generated based on the analysis result, and uses both the element (114) and inherent placement instructions (refer to analogous arguments of claim 6) (col. 4 lines 38-40).].

Regarding Claim 10: Fredlund discloses an image processing method as set forth in claim 2, further comprising the steps of inputting image data of a target scene, analyzing the input image data, and generating said image data by using said first artifact module data and said second artifact module data selected based on results of the analysis [Figs. 1, 2, 4, and 5. The CPU (10) inputs image data via the second input device (14) (col. 3 lines 13-14). This data is manipulated and is therefore the target scene (col. 1 lines 14-16). The step of analyzing the input data is the process of scanning a piece of the location, for example the wallpaper (123) (col. 4 lines 54-63). Figures 5 and 6 represent generated scenes, which link/connect a first artifact (114 and 119) and a second artifact (120) (col. 4 lines 38-40). The scene is different depending on the results of the scan or analysis as shown by the differences in Figures 5 and 6.].

Regarding Claim 14: Fredlund discloses an image processing method as set forth in claim 2, wherein said module data indicates said attributes by using at least one of an image, sound, and text [The module data is stored as digital images (col. 4 lines 14-17).].

Regarding Claim 16: Fredlund discloses a program indicating a routine of image processing using information indicating characteristics of all or a part of a consumer item or its routine and executed by a computer, comprising: a routine for generating element module data indicating an attribute of an element serving as a component of a first artifact, that is, said consumer item; a routine for generating first artifact module data indicating an attribute of said first artifact by using said element module data; a routine for generating second artifact module data indicating an attribute of a second artifact to be linked with said first artifact; and a routine for generating image data of a scene wherein said first artifact and said second artifact are linked by using said first artifact module data and said second artifact module data [The analogous arguments of claim 2 are applicable to claim 16.].

Regarding Claim 17: Fredlund discloses an image processing apparatus for image processing using information indicating characteristics of all or part of a consumer item or its routine, said apparatus generating element module data indicating an attribute of an element serving as a component of a first artifact, that is, said consumer item;

generating first artifact module data indicating an attribute of said first artifact by using said element module data; generating second artifact module data indicating an attribute of a second artifact to be linked with said first artifact; and generating image data of a scene wherein said first artifact and said second artifact are linked by using said first artifact module data and said second artifact module data [The analogous arguments of claim 2 are applicable to claim 17.].

Regarding Claim 18: Fredlund discloses an image processing apparatus as set forth in claim 17, said apparatus further generating material module data indicating an attribute of a material; generating element generating processing module data indicating an attribute of processing for generating said element by using said material; and generating said element module data indicating an attribute of said element generated by processing said material by using said material module data and said element generating processing data [The analogous arguments of claim 1 are applicable to claim 18.]

Regarding Claim 19: Fredlund discloses an image processing apparatus as set forth in claim 18, said apparatus further inputting image data of a target element, analyzing the input image data, and generating said element module data by using said material module data and said element generating processing module data selected based on results of the analysis [The analogous arguments of claim 3 are applicable to claim 19.]

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4, 5, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund in view of Yamada (PN 5,960,726).

Regarding Claim 4: Fredlund discloses an image processing method as set forth in claim 2, further comprising the steps of

- generating material shape module data obtained by gathering information relating to a shape of said material [Figs. 2 and 5. The shape of the background (122) is generated from the region of the digital image (100) excluding the discrete locations (102, 104, and 106) (col. 4 lines 24-26).],
- material color module data obtained by gathering information regarding a color of said material [Fig. 5. The material color module data is obtained from the color of the wallpaper (123) by scanning (col. 4 lines 54-59).],

- material combination module data obtained by gathering information indicating a combined pattern of the shape, color, and design of said material [Fig. 5. The background shape and wallpaper's color and pattern/design are combined as shown in Figure 5 (col. 4 lines 54-57).], and
- generating said element module data by combining information gathered with at least one of said material shape module data, said material color module data, and said material pattern module data based on a combined pattern indicated by said material combination module data [Fig. 5. The element is the modified merged image (114), which is the combination of the material shape module data, the material color module data, and the material pattern module data (col. 4 lines 54-57).]

Fredlund does not disclose generating the material texture module data. However, Yamada discloses the step of generating

- material texture module data obtained by gathering information regarding a texture of said material [Fig. 4, 6, and 7. In step S4, the CPU (7) gathers texture information of a material, represented by example as the flower pattern (A) (col. 7 lines 17-19).].

It would be obvious to one of ordinary skill in the art to modify Fredlund to generate material texture module data as done by Yamada because Fredlund discloses that a tablecloth (132) could be scanned and its attributes incorporated into the background (122) (col. 4 line 63- col. 5 line 3). Therefore it would be obvious since a tablecloth

contains stitching that it would have a texture. One would be motivated to make this modification because texture is a design attribute of many surrounding items within a location and it is desired to incorporate these attributes in generating an image (col. 4 lines 46-50).

Regarding Claim 5: An image processing method as set forth in claim 4, further comprising the steps of inputting image data of a target element, analyzing the input image data, and generating said element module data by using said material combination module data, said material shape module data, said material color module data, and said material pattern module data selected based on results of the analysis [Figs. 1, 2, 4, and 5. The CPU (10) inputs image data via the second input device (14) (col. 3 lines 13-14). This data is manipulated and is therefore the target element (col. 1 lines 14-16). The step of analyzing the input data is the process of scanning a piece of the location, for example the wallpaper (123) (col. 4 lines 54-63). The element module data, represented by the merged image (114), is selected based on the results of the scan, which captures the color, pattern, and combination of the two. The results of the scan are then added to the shape of the background (122) and the element (114) is generated (col. 4 lines 24-26 and 50-57).]

Regarding Claim 20: An image processing apparatus as set forth in claim 17, said apparatus further generating material shape module data obtained by gathering

information relating to a shape of said material, material color module data obtained by gathering information regarding a color of said material, material texture module data obtained by gathering information regarding a texture of said material, and material combination module data obtained by gathering information indicating a combined pattern of the shape, color, and design of said material and generating said element module data by combining information gathered with at least one of said material shape module data, said material color module data, and said material pattern module data based on a combined pattern indicated by said material combination module data [The analogous arguments of claim [The analogous arguments of claim 4 are applicable to claim 20].

9. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund.

Regarding Claim 8: Fredlund discloses an image processing method as set forth in claim 2, further comprising the steps of

- generating second artifact part module data indicating an attribute of a part of said second artifact [Figs. 4, 5, and 6. It would be obvious to one of ordinary skill in the art that since a first artifact could be generated in an image then a second artifact could also be generated. For example, it would be obvious to generate the table (120) in the same manner that the first artifact (119 and 114) was

generated. Therefore, the second artifact part module data is the tablecloth (132) (col. 5 line 1). One would be motivated to generate a second artifact in the same manner as the first artifact to further enhance the overall value and warmth of the image (col. 4 lines 46-50).];

- generating second artifact generating processing module data indicating an attribute of processing for obtaining said second artifact by combining a plurality of said parts [Figs. 5 and 6. The tablecloth's (132) pattern and color in Figure 5 is different than in Figure 6. It is inherent that there be second artifact generating processing module data for combining the color and pattern with the table cloth (132).]; and
- generating said second artifact module data by using said second artifact part module data and said second artifact generating processing module data [Figs. 5 and 6. The table (120), which represents the second artifact, is the combination of the tablecloth (132) and the tablecloth's pattern and color.].

Regarding Claim 9: Fredlund discloses an image processing method as set forth in claim 8, wherein said second artifact part module data includes information indicating a relationship with another second artifact part and said first artifact [Figs. 4, 5, and 6. The table's legs represent a second artifact part and the first artifact is the combined picture frame (119) and merged image (114). The tablecloth (132) relates to the positioning of the table's legs and the first artifact.].

10. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund in view of Debevec (PN 6,628,298).

Regarding Claim 11: Fredlund discloses an image processing method as set forth in claim 2, but does not disclose the use of environmental information in generating the element, first artifact, second artifact, or scene. However, Debevec discloses a method for rendering synthetic objects further comprising the steps of generating *at least one* at least one of said element module data, said first artifact module data, said second artifact module data, and said scene based on information on an environment wherein said first artifact or said second artifact is used or an environment to which said scene is applied [illumination measurements, which are types of environment information, are combined with the existing photographs to create the scene (col. 3 lines 55-61). It would be obvious to one of ordinary skill in the art to modify Fredlund's scene with illumination information because like Fredlund's scene, Debevec's scene is created from synthetic objects (col. 3 lines 44-47). Furthermore, one would be motivated to make this modification to create a more realistic scene (col. 3 lines 58-61).].

Regarding Claim 12: Debevec discloses an image processing method as set forth in claim 2, further comprising the step of generating image data of said scene based on information regarding at least one of a background, visual point, and light source of said

scene [illumination measurements, which provides information regarding the background, visual point, and light source, are combined with the existing photographs to create the scene (col. 3 lines 55-61).].

11. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredlund in view of Rose (PN 5,930,769).

Regarding Claim 13: Fredlund discloses an image processing method as set forth in claim 2, but does not disclose the method further comprising managing at least one of said module data by defining it using an object oriented object or file, classifying it in accordance with its attributes, and adding a tag in accordance with the classification. However, Rose discloses a method comprising managing at least one of said module data by defining it using an object oriented object or file, classifying it in accordance with its attributes, and adding a tag in accordance with the classification [Fig. 2. The clothes items (14, 16, 18, 20, 22, 24, and 26), representative of artifacts, are object oriented files (col. 6 lines 65-66). The clothes are classified/categorized in accordance with their fashion, which indicate attributes like size and shape (col. 6 lines 66-67). Since the fashions are stored on portions of a database it is inherent that a tag or similar memory address is utilized to access this information according to categories.]. Fredlund and Rose are combinable because they are from the same field of endeavor. It would be obvious to one of ordinary skill in the art to modify Fredlund's combined picture frame

(119) and merged image (114), so it would be defined by an object oriented file, classified according to its attributes, and tagged according to the classification as taught by Rose. One would be motivated to make this modification to allow for increased accessibility, which allows a greater variety of artifacts to be generated without increasing the complexity of stored data.

Regarding Claim 15: Fredlund discloses an image processing method as set forth in claim 2, but does not disclose that said module data is a hyper data having a hyperlink function for referring to another entity. However, Rose discloses a method wherein said module data is a hyper data having a hyperlink function for referring to another entity [Rose teaches that this system may be implemented on the Internet (col. 2 line 65). In which case it would be inherent that the separate web pages would be used to display the menus and fashions. Since the content of one web page depends on the selection made on another (col. 6 line 66 – col. 7 line 3), then it is inherent that the module data is a hyper data having a hyperlink to access the desired fashion.]. Fredlund and Rose are combinable because they are from the same field of endeavor. It would be obvious to one of ordinary skill in the art to modify Fredlund's module data to be hyper data for use with the internet as taught by Rose. One would be motivated to make this modification to allow for increased access and sharing capabilities.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kawade et al. (PN 6,661,906) is cited for teaching image generation by combining components stored in multiple databases and arranged according to rules also stored in a separate database.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig W Kronenthal whose telephone number is (571) 272-7422. The examiner can normally be reached on 8:00 am - 5:00 pm / Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (571) 272-7414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

03/30/05  
CWK

MEHRDAD DASTOURI  
PRIMARY EXAMINER

*Mehrdad Dastouri*